

**National Geological and Geophysical Data Preservation Program  
Final Report**

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## Abstract

The Indiana Geological Survey (IGS), Indiana University, proposed a data preservation project to the National Geological and Geophysical Data Preservation Program (NGGDPP) requesting funds in the amount of \$29,546 for FY2008. The total sum of \$19,184 was awarded. The budget was adjusted by removing the wage and benefits one hourly employee, and the indirect cost was recalculated bringing the new budget to \$19,184.

The work effort of the project was adjusted whereby the Indiana Geological Survey undertook a multifaceted effort to: 1) complete the initial inventory begun under the first U.S. Geological Survey NGGDPP financial assistance program from FY2007, 2) develop a Long-Range Data Preservation Plan, 3) develop an Inventory Database, and 4) begin to catalog those holdings that receive the greatest use.

The inventory included metadata for each data set. Indiana Geological Survey policy includes a requirement for metadata. It states: *“Finalized or publicly available data from the IGS includes metadata compliant with Federal Geographic Data Committee (FGDC) standards.”* Each metadata record was delivered in an XML format, included the unique site identifier, collection identifier, location information, material or data description, and additional descriptive information relevant to the data set.

In order of priority, these tasks were performed and completed within the year-long duration of the project:

- 1) Complete the initial inventory;
- 2) Develop a Long-Range Data Preservation Plan;
- 3) Develop an IGS Inventory Database;
- 4) Begin to catalog those holdings that receive the greatest use.

## Indiana Data Preservation Program 2008

### Final Report

#### Task 1: Complete the Initial Inventory

The Indiana Geological Survey (IGS) continues to carry out the initial collections-level inventory begun in 2006 for the NGGDPP Inventory Program.

*Geological Survey Main Building:* Work is continuing on smaller collections. These collections will have to be evaluated, appraised, and organized by current staff because they include records that were left by retired or previous staff. These records have not yet been entered into the NGGDPP Inventory.

*Coal and Industrial Mineral Section Records:* The collections in the Coal and Industrial Mineral Section were inventoried and six records were added to the National catalog.

*Materials Testing Facility,* one of four outbuildings: Many of the collections were inventoried this year. Most of these materials were evaluated and redistributed to the IGS Educational Outreach program and the Indiana University Geology Library. We are searching to locate corresponding metadata for five collections of physical geologic samples. Two large physical collections are being inventoried to the record level for the National Catalog.

Prior years' inventory collections, supported by NGGDPP and the Indiana Geological Survey.

<b>Inventory</b>			
<u>Collection</u>	<u>Location (s)*</u>	<u>Section</u>	<u>NGGDPP</u>
Rock cores-Well cores	Core Library	Subsurface	P1087
Lithology logs-Strip logs	Main S019	Subsurface	P1126
Maps-Subsurface collection	Main S116 and 130	Subsurface	P1127
Well logs-Non-water wells, mostly petroleum exploration	Main S116	Subsurface	P1128
Thin sections-Well core slides	Main S020A	Subsurface	P1129
Rock Cuttings-Well cuttings	Main S001	Subsurface	P1131
Geophysical data-Gamma-ray logs	Electronic	Environmental	P1132
Geophysical data-Gamma-ray logs	Main S318	Environmental	P1133
Hand samples-Gamma-ray log samples	Testing, Laundry, 11th	Environmental	P1138
Fluid samples-Water	Main S414	Geochemistry	P1139
Geochemical data-Misc reports and data	Main S418	Geochemistry	P1140
Geochemical samples-Crushed rock samples	Dept basement	Geochemistry	P1212
Paper reports-Misc drilling reports	Main S418	Geochemistry	P1213
Coal map cabinets	Main S224	Coal & Industrial Minerals	P1604
Crushed coal samples, 50 ml bottles	Main S228	Coal & Industrial Minerals	P1605
Crushed coal samples, 100 ml plastic jars	Main S228, S224A	Coal & Industrial Minerals	P1606
Field notebooks in S224	Main S224	Coal & Industrial Minerals	P1607
State publications by county	Main S224	Coal & Industrial Minerals	P1608
Coal chemical data	Main S224	Coal & Industrial Minerals	P1609
Vibracore description	Main S127	Coal & Industrial Minerals	Active
Sediment peels	Laundry	Coal & Industrial Minerals	Active
Grain-size analyses from Vibracore	Main S127	Coal & Industrial Minerals	Active
Educational outreach	Main S018	Educational Outreach	Active
INDOT ledge samples	Laundry	Coal & Industrial Minerals	Active
Geochemical samples-Crushed rock samples	Testing Facility	Geochemistry	Active

#### \*Locations

Core Library refers to the IGS Core Library Building.

Dept basement refers to the Department of Geological Sciences Building.

Laundry refers to the IGS Laundry Storage Building (previously owned by a laundry company).

Main refers to the IGS Main Building.

Testing Facility refers to the IGS Materials Testing Facility.

#### **Task 2: Develop a Long-Range Data Preservation Plan**

The purpose of the IGS Long-Range Data Preservation Plan is to identify, catalog, preserve, and make accessible to IGS investigators, as well as the interested public, all the physical and digital data that have been acquired by this institution through collection, generation, or donation. Moreover, the plan provides for the long-range protection and integrity of the collections.

The IGS's Long-Range Data Preservation Plan has been made available to its staff. As part of the annual performance and planning documents that each professional staff member completes, data preservation is now included as a portion of their work commitment. It is an expectation for each staff member to participate in data preservation.

#### **Task 3: Develop an IGS Inventory Database**

The Indiana Geological Survey is actively working to develop a comprehensive data-flow process. The process will begin with receiving, documenting, storing, and archiving materials and, when necessary, de-accessioning materials. This task was delayed because the IGS Database Administrator left employment and it took several months to replace this position. The process concept has been largely developed on paper and the physical arrangements are being set up to implement the system. The actual electronic database will be further developed in the next grant period.

#### **Task 4: Begin to Catalog those Holdings that Receive the Greatest Use**

The Petroleum Well Records and corresponding physical data have item-level metadata in the Petroleum Database Management System that is available online from the IGS Web site. Work is currently underway to make more of these records available in a digital format. The Petroleum Database Management System Web site receives approximately 4,500 visits each month.

Crushed stone quarry ledge samples: In the original grant proposal the IGS said it would work on the inventory of the crushed stone quarry ledge samples for the National Catalog. The collection was originally located in two buildings and has been relocated to one building. However, we decided to change the inventory activities to the geochemical samples collections because that Section Head retired this year; it was a possibility that we would lose the opportunity to collect important information about these samples. The geochemical collection is housed in two locations. Many of these samples have duplicates that will be discarded. Each sample is being recorded and cross referenced with the analysis data. There are currently 18,542 recorded samples in the Materials Testing Facility and 6,087 sample recorded in the basement of the Geological Survey Main Building. Additional data links are being located and used to test an electronic inventory database system that will link various data sets.

The Gamma-ray log sediment sample collection was housed in four buildings. The collection has been reorganized and is now located in two buildings with the documented samples at the Showers 11<sup>th</sup> Street Storage Facility stored in its archival location. The current inventory stands at 6,095 samples. Because of environmental conditions we have not begun the fourth remaining building, the Ideal Laundry Storage Building. In the 2010 Indiana Geological Survey Data Preservation proposal we have requested funds to begin inventorying the material in that building.